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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Christopher Douglas MOFFATT, et al.

Serial No.:

10/690,613

Art Unit:

2611

Filed:

October 23, 2003

Examiner:

David B. Lugo

Title:

SYSTEM AND METHOD FOR REDUCING PEAK-TO-

AVERAGE POWER RATIO FOR MULTI-CARRIER

COMMUNICATION SYSTEMS

AMENDMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated July 6, 2009, the Applicant submits the following Amendments and remarks:

Applicant's Amendment to the Claims begin on sheet 2 of this paper.

Applicant's Remarks begin on sheet 4 of this paper.

Amendment to the Claims

1. (Original) A method for reducing the peak-to-average power ratio of a communication signal comprising the steps of:

- (a) sequencing a data signal according to a data vector to thereby create a sequenced data signal;
- (b) modulating a first plurality of carrier waves at a second plurality of frequencies with said sequenced data signal to thereby create a modulated signal;
 - (c) measuring the peak-to-average power ratio of the modulated signal;
 - (d) comparing said power ratio with a predetermined threshold;
- (e) if said power ratio exceeds said predetermined threshold, sequencing said data signal according to a data vector different from previous data vectors to thereby create a sequenced data signal different from previous sequenced data signals and repeating steps (b)-(e) until said power ratio does not exceed said predetermined threshold;
- (f) if said power ratio does not exceed said predetermined threshold, appending to the modulated signal a data map signal associated with the data vector for which said power ratio does not exceed said predetermined threshold to thereby create an appended signal;
 - (g) sampling said appended signal;
- (h) reducing amplitude of said samples which exceed a predetermined range to thereby create a reduced amplitude signal;

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(i) filtering said reduced amplitude signal to thereby create said communication signal with a reduced peak-to-average power ratio.

- 2. (Original) The method to claim 1, further comprising the step of reducing amplitude of samples adjacent to the samples exceeding the threshold.
 - 3.-13. (Cancelled)

REMARKS

Claims 1 and 2 are currently pending with the entry of this Amendment.

Claims 3-13 have been cancelled without prejudice.

Claims 1 and 2 have been allowed.

The Applicant appreciates the Examiner's allowance of Claims 1 and 2. Claims 3-13 have been cancelled and are the subject of a continuing application. There are no outstanding objections or rejections to Claims 1 and 2.

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Conclusion

Based on the above explanation, Applicant believes that the present application is in condition for allowance and, as such, it is earnestly requested that Claims 1 and 2 be allowed to issue in a U.S. Patent.

If the Examiner believes that an in-person or telephonic interview with the Applicant's representatives will expedite the prosecution of the subject patent application, the Examiner is invited to contact the undersigned agents of record.

The Office is requested and hereby authorized to charge the appropriate extension-of-time fees against **Deposit Account No. 08-0870**.

Respectfully submitted,

/mcc/
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Telecopier: (202) 776-7801 Date: September 28, 2009